

This listing of claims replaces all prior versions and listings of the claims.

Deletions are indicated by double brackets and/or strikethrough, and additions are indicated by underlining.

## AMENDMENTS TO THE CLAIMS

### Claims 1-21 (Canceled)

22. (Currently Amended) A method of treating, managing or preventing obstructive lung disease comprising administering to a patient a pharmaceutical composition comprising an effective amount of a medicament selected from the group consisting of:

(a) heat killed whole cell *Mycobacterium w*,  
(b) sonicated *Mycobacterium w*,  
(c) a solvent extract of *Mycobacterium w*, wherein the solvent is selected from the group consisting of chloroform, ethanol, methanol, acetone, phenol, isopropyl alcohol, acetic acid, urea, and hexane;

(d) an enzymatic extraction of *Mycobacterium w*, wherein the enzyme is selected from the group consisting of liticase and pronase; and

(e) admixtures thereof.

23. (Previously Presented) The method of claim 22 wherein the method is for treating, managing or preventing asthma.

24. (Previously presented) The method of claim 23, wherein the method is for delaying attacks of asthma.

25. (Previously Presented) The method of claim 23, wherein the method is for reducing the requirement of drugs used to improve lung function during the management of asthma.

26. (Previously Presented) The method of claim 23, wherein the method is for improving lung function in the presence or absence of other drugs.

27. (Previously Presented) The method of claim 23, wherein the asthma is bronchial asthma.

28. (Previously Presented) The method of claim 22, wherein the pharmaceutical composition comprises an admixture of heat killed whole cell *Mycobacterium w* and sonicated *Mycobacterium w*.

29. (Previously Presented) The method of claim 22, wherein the pharmaceutical composition comprises sonicated *Mycobacterium w*.
30. (Canceled)
31. (Canceled)
32. (Currently Amended) The method of claim 22, wherein the pharmaceutical composition comprises a solvent extract of *Mycobacterium w* wherein the solvent is selected from the group consisting of chloroform, ethanol, methanol and acetone[, phenol, isopropyl alcohol, acetic acid, urea, and hexane.]
33. (Canceled)
34. (Canceled)
35. (Canceled)
36. (Currently Amended) The method of claim [22] 48, wherein the pharmaceutical composition further comprises an adjuvant.
37. (Currently Amended) The method of claim 36, wherein the adjuvant is selected from the group consisting of mineral oil, mineral oil and surfactant, Ribi adjuvant, Titer-max, syntax adjuvant formulation, aluminum salt adjuvant, nitrocellulose adsorbed antigen, immune stimulating complexes, Gebru adjuvant, super carrier, elvax 40w, L-tyrosine, monatanide (manide-oleate compound), Adju prime, Squalene, Sodium phthalyl lipopoly saccharide, calcium phosphate, saponin, melonoma antigen and muramyl dipeptide (MDP).
38. (Currently Amended) The method of claim [22] 48 wherein the pharmaceutical composition further comprises a surfactant.
39. (Previously Presented) The method of claim 38, wherein the surfactant is polyoxyethylene sorbitan monooleate (Tween 80) or Titon X100.
40. (Previously Presented) The method of claim 38, wherein the surfactant is present in the pharmaceutical composition in a concentration of up to 0.4%.
41. (Previously Presented) The method of claim 38, wherein the surfactant is present in the pharmaceutical composition in a concentration of up to 0.1%.
42. (Currently Amended) The method of claim [22] 48, wherein the pharmaceutical composition further comprises a preservative.
43. (Previously Presented) The method of claim 42, wherein the preservative is Thiomerosal and is present in a concentration of 0.01% w/v.

44. (Canceled)

45. (Currently Amended) The method of claim [22] 48, wherein the pharmaceutical composition is heat killed *Mycobacterium w* in a unit dosage form comprising at least  $10^5$  *Mycobacterium w* as:

- (a)  $10^5$  heat killed whole cell *Mycobacterium w*
- (b)  $10^5$  sonicated *Mycobacterium w*,
- (c) a solvent extract of  $10^5$  *Mycobacterium w* wherein the solvent is selected from chloroform, ethanol, methanol and acetone[, phenol, isopropyl alcohol, acetic acid, urea, and hexane], or
- (d) an enzymatic extraction of  $10^5$  *Mycobacterium w* wherein the enzyme is selected from the group consisting of liticase and pronase.

46. (Currently Amended) The method of claim [22] 44 wherein the pharmaceutical composition is in a unit dosage form comprising at least  $10^7$  *Mycobacterium w* as:

- (a)  $10^7$  heat killed whole cell *Mycobacterium w*,
- (b)  $10^7$  sonicated *Mycobacterium w*,
- (c) a solvent extract of  $10^7$  *Mycobacterium w*, wherein the solvent is selected from chlorophorm, ethanol, menthanol, acetone, phenol, isopropyl alcohol, acetic acid, urea, and hexane, or
- (d) an enzymatic extraction of  $10^7$  *Mycobacterium w* wherein the enzyme is selected from the group consisting of liticase and pronase.

47. (Currently Amended) The method of claim [22] 46 wherein the pharmaceutical composition is in a unit dosage form comprising between  $10^8$  and 108 *Mycobacterium w* as:

- (a) between  $10^8$  and  $10^9$  heat killed whole *Mycobacterium w*,
- (b) between  $10^8$  and  $10^9$  sonicated *Mycobacterium w*,
- (c) a solvent extract of between  $10^8$  and  $10^9$  *Mycobacterium w* wherein the solvent is selected from the group consisting of chloroform, ethanol, methanol and, acetone[, phenol, isopropyl alcohol, acetic acid, urea, and hexane], or
- (d) an enzymatic extraction of between  $10^8$  and  $10^9$  *Mycobacterium w* wherein the enzyme is selected from liticase and pronase.

48. (Previously Presented) A method of treating, managing or preventing obstructive lung disease comprising administering to a patient a pharmaceutical composition comprising an effective amount of heat killed whole cell *Mycobacterium w.*

49. (Canceled)

50. (Canceled)

51. (Canceled)

52. (Canceled)

53. (Canceled)

54. (Canceled)